

protein allergens that lie within the scope of the pending claims. More specifically, the following post-art references are attached to this response as Exhibits A-G:

A. Timothy grass pollen allergen – Ph1 p 5b

Schramm *et al.*, “Allergen engineering: variants of the Timothy grass pollen allergen Ph1 p 5b with reduced IgE-binding capacity but conserved T cell reactivity”, *J. Immunol.*, 162:2406-2414, 1999.

B. English walnut allergen – Jug r 1

Robotham *et al.*, “Linear IgE epitope mapping of the English walnut (*Juglans regia*) major food allergen, Jug r 1”, *J. Allergy Clin. Immunol.* 109:143-149, 2002.

C. Latex allergen – Hev b 5

Beezhold *et al.*, “Mutational analysis of the IgE epitopes in the latex allergen Hev b 5”, *J. Allergy Clin. Immunol.* 107:1069-1076, 2001.

D. Ryegrass pollen allergen – Lol p 5

Swoboda *et al.*, “Mutants of the major ryegrass pollen allergen Lol p 5, with reduced IgE-binding capacity: candidates for grass pollen-specific immunotherapy”, *Eur. J. Immunol.* 32:270-280, 2002.

E. Potato allergen – Sol t 1 (Patatin)

Astwood *et al.*, “Identification and characterization of IgE binding epitopes of patatin, a major food allergen of potato”, *J. Allergy Clin. Immunol.* 105:S184 (Abstract 555), 2000.

F. Soybean allergen – P34/Gly m Bd 30K

Helm *et al.*, “Mutational analysis of the IgE-binding epitopes of P34/Gly m Bd 30K”, *J. Allergy Clin. Immunol.* 105:378-384, 2000.

G. Shrimp allergen – Pen a 1 (Tropomyosin)

Ayuso *et al.*, “Identification and mutational analysis of major epitopes of the shrimp allergen Pen a 1 (Tropomyosin)”, *J. Allergy Clin. Immunol.* 105:S140 (Abstract 423), 2000.


Lehrer *et al.*, "Current understanding of food allergens", *Ann. N.Y. Acad. Sci.* 964:69-85, 2002.

Applicant respectfully submits that this evidence shows that there is no particular magic in the sequence of peanut allergens that makes these allergens more susceptible to mutation; the inventive principles, once demonstrated may be readily applied to other protein allergens.

Conclusion

Based on the arguments presented above, it is submitted that the pending claims are enabled and hence allowable. If a telephone conversation would help expedite prosecution of this case, please do not hesitate to contact the undersigned at (617) 248-5175. Additionally, please charge any fees that may be required, or credit any overpayment, to our Deposit Account No. 03-1721.

Respectfully submitted,


Brenda Herschbach Jarrell, Ph.D.
Registration No. 39,223

Choate, Hall & Stewart
Exchange Place
53 State Street
Boston, MA 02109
(617) 248-5000
Dated: 9/17/2002

I hereby certify that this correspondence is being
deposited with the United States Postal Service as first
class mail in an envelope addressed to: Assistant
Commissioner For Patents, Washington, D.C. 20231
on 9/19/02

